

IOWA BIRD LIFE

PUBLISHED QUARTERLY BY THE
IOWA ORNITHOLOGISTS' UNION

VOL. XX

MARCH, 1950

NO. 1



OFFICERS OF THE IOWA ORNITHOLOGISTS' UNION

President—Ralph W. Johnson, Ames, Iowa

Vice-President—Dr. Robert F. Vane, Cedar Rapids, Iowa

Sec'y-Treas.—Miss Lillian Serbousek, 1226 Second St. S.W.,
Cedar Rapids, Iowa

Librarian—Dr. J. Harold Ennis, Cornell College, Mt. Vernon, Iowa

Editor—Fred J. Pierce, Winthrop, Iowa

Executive Council:

Albert C. Berkowitz, Des Moines, Iowa

Mrs. A. T. Lambert, Sioux City, Iowa

E. A. Kurth, Grinnell, Iowa

The Iowa Ornithologists' Union was organized at Ames, Iowa, February 28, 1923, for the study and protection of native birds and to promote fraternal relations among Iowa bird students.

The central design of the Union's official seal is the Eastern Goldfinch, designated State Bird of Iowa in 1933.

Publications of the Union: Mimeographed letters, 1923-1928; 'The Bulletin,' 1929-1930; 'Iowa Bird Life,' beginning 1931.

SUBSCRIPTION RATES: \$1.00 a year. Single copies 25c each. Subscription to the magazine is included in all paid memberships, of which there are four classes, as follows: Contributing Member, \$10.00 a year; Supporting Member, \$3.00 a year; Regular Member, \$1.00 a year; Junior Member (under 16 years of age), 50c a year.

EDITORIAL AND PUBLICATION OFFICE
WINTHROP, IOWA

Entered as second-class matter February 9, 1932, at the post office at Winthrop, Iowa, under the Act of March 3, 1879.

NOTES ON BOB-WHITE NESTING BEHAVIOR¹

By W. D. KLIMSTRA^{2, 3}

Iowa Cooperative Wildlife Research Unit,
Iowa State College
AMES, IOWA

An investigation of the life history and ecology of the Interior Bob-white, *Colinus virginianus mexicanus*, was conducted in 1946 and 1947 on the Eldon Research Area in Davis County, Iowa. The purpose of the study was to obtain data on the response of Bob-whites to land management practices. This paper is a compilation of notes on Bob-white nesting behavior gathered during the investigation. The 1600-acre tract supported a prenesting population of 72 birds in 1946, and 48 in 1947.

PRENESTING

With the approach of spring and warmer weather, winter coveys showed signs of dispersal. Although pairing was not immediate, most coveys split into separate groups during the day but assembled together for roosting. These roosts were not as compact as in winter and droppings were often scattered over a square-foot area. Some roosts were found with one or two smaller roosts a few feet away, possibly indicating separation of pairs from the main group.

An increase in size of the daily range generally accompanied the relaxation of the covey ties. Coveys seldom returned to winter roosting sites but tended to roost wherever their daily activities took them. Roosting in sparse cover in fence rows, roadsides, and pastures was not uncommon, whereas heavy cover of idle field and weed patches were utilized in winter. This particular shifting was not indicative of shortage of food or cover in the winter ranges, but habitats that were not occupied in winter came into use during spring dispersal.

The dates of commencement of the spring break-up, based on the first "bob-white" call (Stoddard, 1931), were March 2, 1946, and April 16, 1947. Prevailing climatic conditions were believed to have had an important bearing upon the wide difference in dates. In 1946, temperatures were above normal through April (Fletcher, 1946). For the same period in 1947, they were consistently below normal (Fletcher, 1947). The break-up period in 1946 continued approximately 70 days, but in 1947, only about 34 days. Despite the weather differences, the periods of dispersal for both years were believed completed by May 16. In 1946, a lapse of 49 days occurred between initial pairing of Quail and the laying of the first egg; in 1947, 16 days.

During the early part of the dispersal, the "bob-white" calls were limited and did not occur at any definite time of day. As the season advanced, the number of calls increased and were associated with early morning (5:00-8:00 a.m.) and late afternoon, (4:00-7:00 p.m.).

NESTING

A comparison of the locations of late winter coveys and the first pairs indicated that during the initial dispersal mated birds remained in the vicinity of the winter ranges. Pairs became more evenly distributed over the area as the nesting season continued. This distribution of pairs was apparently influenced by at least five factors: (1) The progression of the nesting season was accompanied by a widespread improvement in cover. (2) The small

1 Journal Paper No. J-1713 of the Iowa Agricultural Experiment Station, Ames, Iowa, Project No. 494. Abridged from Master of Science Thesis, Library, Iowa State College.

2 The study was conducted by the writer while a research fellow of the Iowa Cooperative Wildlife Research Unit; Iowa State College, Iowa State Conservation Commission, U. S. Fish and Wildlife Service and Wildlife Management Institute cooperating. He is indebted to personnel of the Iowa Cooperative Wildlife Research Unit and Iowa State Conservation Commission.

3 Now Assistant Professor, Southern Illinois University, Carbondale, Illinois.

breeding population did not require an immediate wide dispersal of pairs. (3) Nest destruction was followed by a shift of pairs to new localities. (4) Locations of winter covey territories regulated to a certain degree the areas used for nesting. (5) Suitable nesting habitats influenced the distribution of pairs. For example, the large acreage of timber over much of the southern half of the Research Area not only failed to provide nesting cover but evidently acted as a barrier to the movements of Quail.

Actual observations on movements of individual pairs during the nesting season were not made. General proof that such shifting occurred was found in the appearance of birds in previously unoccupied areas and in their disappearance from occupied areas. Shifts occurred almost in waves during June 1947 when adverse weather was influential in causing nest abandonments.

UNMATED BIRDS

All single Quail encountered during the nesting seasons were males. The conspicuous activities of single cocks, such as continuous calling and shifting, usually identified them, but on occasion mated males exhibited similar behavior.

Movements of single birds could often be followed by a characteristic call, such as a cock that consistently called "bob-bob-bob-white" in 1946. This cock commenced calling as soon as the sun appeared above the horizon. For the first hour or until the mated pair of Quail with which it was associated were believed to have moved from their roost for feeding, the unmated male remained largely in one place, which on one occasion proved to be 3 feet from the night roost.

Fewest calls were heard around mid-day and calling was less intense during the afternoon period than in the morning. During the mid-day period single males were usually found loafing, dusting, or sunning in a favorite place. The single cock with the "bob-bob-bob-white" call was often found only a short distance from the mated pair; the minimum observed distance was 10 feet and the maximum 28 feet. All the roosts of unmated males were less than 50 feet from those of mated pairs.

Excess cocks were extremely bold. During July, 1947, around mid-day one unmated male on several occasions was noted to move along a fence row near the writer's residence and then fly into a tree less than 15 feet from the house. From this point the bird would call. People moving beneath the tree or noises in or around the building did not affect the cock's behavior. Unmated males approached in the field seldom stopped calling but usually reduced their volume until the notes were barely audible. After the observer remained in the same spot for a few minutes, the birds commenced their normal calling, although continuing to show some suspicion.

On one occasion data were obtained which indicated that an unmated cock associated with a hen in the absence of her mate. While the writer was sitting behind a tree along a creek bank, a rustling noise attracted attention to a male and a female Bob-white coming down a timbered hillside with the hen in the lead by about 3 feet. They proceeded down the embankment toward a small stream. About 4 feet from the creek, the cock "froze"; the hen continued to the water, drank, and crossed to the other side. Another cock was met by the female on the opposite bank. Low gurgling notes could be heard as the hen approached the cock. The male appeared to puff up and walked around the female, keeping close body contact. They then proceeded up the edge of a wooded gully scratching and picking in the leaves. As soon as the pair left their meeting site, the single cock that had remained on the opposite side of the creek, crossed over and commenced calling, at first in very low notes and then quite loudly. These calls averaged six or seven a minute. After about 15 minutes, the bird moved off in the direction that the pair had taken.

When the observer left the area about four hours later, the single mate was still calling.

Upon examining the area from which the hen and cock had initially come, an active nest was found. This appeared to indicate that the single cock met the hen as she was on the way to the waiting site of her mate.

The fact that the number of unmated cocks appeared to fluctuate through the nesting season possibly indicated two things: (1) an ingress or egress of these birds as a result of their shifting around and (2) mortality among the nesting hens. In 1946, one unmated male was in evidence at the completion of the spring break-up, but four weeks later five were under observation. Two appeared following known cases of hen mortality. Two weeks later (July 1) only one male was detected; by July 15 three were observed. No evidence of these birds was noted after August 10. In 1947, only one single cock was observed following spring dispersal and its presence was not detected after ten days. Thirty-six days elapsed before others (two) were observed. These birds remained in evidence until the latter part of August.

THE "BOB-WHITE" CALL

Beginning with the spring break-up, cock birds commenced their "bob-white" calling and continued through the nesting period. An attempt was made to count these calling birds for possible data on numbers of pairs and also for information on their location. Counts were made at 7:30 to 7:35 a.m. and at 4:30 to 4:35 p.m. twice a week, April through August, under similar atmospheric conditions whenever possible (Table 1). The semi-weekly counts were totaled semi-monthly. Data indicated that there was a steady increase in calls from the time of commencement in the spring to early summer, and then a decrease until no more calls were heard. A peak in the calling occurred during June 16-30 in 1946 and July 1-15 in 1947. More calls were heard during the morning period than in the afternoon.

Direct population data on breeding pairs could not be obtained from call counts, for they did not show a relationship with the known number of pairs in a given area (Table 1). Undoubtedly there were many factors influencing the number of cocks calling at any one time. For example, the four counts for the period June 16-30 in 1946 were 16, 11, 15, and 10, even though seemingly similar weather conditions existed. Minor climatic factors, unmated cocks, stage of nesting of various pairs, or time of day and season without a doubt had their effect individually or collectively on the number of birds heard calling.

Stoddard (1931) believed that calling cocks were largely unmated birds, but these findings did not support his belief. Field observations indicated that during certain periods of the breeding season, mated cocks produced the "bob-white" call. Further, studies were made on unmated cocks and at

TABLE 1. BOB-WHITE CALLS AS RELATED TO TIME OF DAY, SEMI-MONTHLY PERIODS, AND POTENTIAL CALLERS ON THE ELDON RESEARCH AREA, 1946 AND 1947

Semi-monthly periods	1946				1947			
	Time of Day		Potential Callers		Time of Day		Potential Callers	
	7:30 - 7:35 a.m.	4:30 - 4:35 p.m.	Single cocks	Mated cocks	7:30 - 7:35 a.m.	4:30 - 4:35 p.m.	Single cocks	Mated cocks
April 1-15	0	1	0	8	1	2	2	9
16-30	3	1			0	0		
May 1-15	6	5			1	0		
16-31	7	5	1	18	3	2	1	15
June 1-15	9	7	2	18	6	4	0	14
16-30	10	9	5	15	8	6	2	12
July 1-15	13	8	3	16	9	5	2	12
16-31	7	6	1	12	12	9	2	13
August 1-15	3	3	3	10	5	7	2	11
16-31	2	1	3	10	6	3	2	9

no time in the breeding season did their numbers approach that of the calling birds except late in the nesting season (Table 1).

EGG-LAYING

The information obtained concerning the behavior of cocks and hens during egg-laying is limited. Cocks that were known to have a laying mate always had a certain place at which they waited for the hen. In sixteen instances, this waiting site involved woody vegetation, either a clump or a single large tree. The distance of these waiting areas from the nest ranged from 15 to 750 feet. During these periods of waiting, cock birds were never noted to call, except on one occasion when the hen was gone for over two hours. In this instance, the hen appeared in flight a considerable distance from the nest shortly after the cock had given a low "bob-white" call. A tractor in operation near the nest was believed to have disturbed the hen. The female usually came by foot to the waiting male. This approach was never observed except as above and was detected only by the cock's very low "greeting call" and the appearance of the female bird. Following the hen's return, they usually remained for a time in the immediate cover, the hen being the first to move off.

Data on two nests during this period were of interest. One nest was discovered when it contained four eggs. For each of the next four days, an additional egg was deposited and then for three days no eggs were laid. It was assumed that the clutch had been completed or deserted. On the fourth day, an egg of different size and shape from those laid earlier was added. Five more such eggs appeared on the five subsequent days. Then for the following 12 days, there was no evidence of birds at the nest and it was believed abandoned. During this period the nest was visited frequently by various individuals, and as a result cover was trampled around it. On the 13th day a



BOB-WHITE HIDING IN HEAVY COVER

Photograph by Jim Sherman, published through courtesy of
Iowa Conservation Commission.

cock was found incubating the eggs and 18 days later left the nest with a brood of ten. The four unhatched eggs represented two of each type of egg.

When this nest was first found, two pairs were in the immediate locality, and it was not certain as to which birds were in possession. Following the initial cessation of egg-laying, one pair was noted to be absent from their usual range and was believed to have shifted 2,000 feet to the north. This movement and the nest abandonment coincided with agricultural activities. The appearance of the new type egg suggested that the remaining pair had taken over, for no other nest was found and they were the only pair in the vicinity.

Two days following the termination of the second egg-laying activities, a cock was heard calling almost continually. Calls continued for several days and always from the same locality. The cock flew a short distance when flushed, and when flushed repeatedly, it flew in an arc as if refusing to leave the original spot. It was thought to be the same bird that assumed the incubation duties. Calling ceased on the tenth day, and the only bird found on the 13th day was the male on the nest. There was no evidence as to what had happened to the hen.

Stoddard (1931) reported that early in the laying cycle minor disturbances caused Bob-whites to abandon their nests, but the tendency toward abandonment decreased as the period of the birds' ties with their nests increased. An exception was believed to have been observed during this investigation. A newly discovered nest, containing seven eggs, was revisited four days later, and the eleven eggs were scattered as much as a foot in front of the nest entrance. The nest was rebuilt and the eggs replaced in the nest. On the following fourth and seventh days, the previous events were re-enacted without any apparent disruption in the egg-laying activities. But on the eighth day, the nest was discovered undisturbed except that the eggs had disappeared. Positive evidence which indicated the predator or predators was lacking.

During the two nesting seasons "dropped" eggs were found on six occasions, and only one could be associated with a nest. Three egg shells were only partially developed, having a portion of shell on the blunt end and a tough membrane over the remainder. These eggs were associated with two pair of Quail that had deserted their nests.

INCUBATION

Reasonably accurate data were obtained on the incubation period for Quail eggs in six nests. In four instances the incubation period was 23 days, in one 18 days, and in another 24 days. The 23-day period corresponds with Stoddard's (1931) data among Bob-whites in the field and does not deviate materially from the 22 days required in artificial incubation (Nestler and Bailey, 1949). There is no clear explanation for the 18-day period.

Early in incubation the setting bird was quite easily flushed, usually before the observer was within 10 feet of the nest (this was dependent somewhat on the density of the cover). As the broodiness increased, they were less easily disturbed and when approached the bird would crouch low in the nest, even to the extent of exposing some of the eggs. On occasion they would slip from the nest and into the cover without the slightest sound. Usually injury would be feigned in an attempt to draw the intruder away.

Incubating birds were found to leave the nest at least twice a day during the first seven to ten days of incubation, once in the morning and once in the afternoon. As the incubation period progressed, the birds became increasingly broody and their absences were restricted to a short period late in the afternoon, usually between 4:00 and 5:00 p.m. These periods of absence were quite long (2 to 3 hours) early in the incubation period but decreased as hatching time approached. Nestling birds tended to be absent from the nest for a longer period during July and August than for May and June.

Notes on the incubating cock previously mentioned were of interest. Twice during the first week of incubation the cock was gone from the nest from about 8:00 a.m. until 5:00 p.m. Other absences during that period were also quite long. During the last week before hatching, the cock was known to have left the nest only on two occasions for a short period late in the afternoon.

While their mates were incubating, most cocks had a specific site where they would wait. In four of the six instances, when it was possible to make observations on the complete nesting cycle, the waiting areas were found to coincide with the site used when the hen was still laying. Their sizes appeared to be dependent on the cover, which in each case included shrubs and trees. The extremes in distance of the waiting sites from the nests were 225 and 783 feet, with a mean of 558 feet.

It was observed that early in the period of incubation cocks did considerable calling during the morning hours of 7:00 to 9:00 and then again around 4:00 in the afternoon. As incubation advanced, the intensity of calling gradually tapered off until no calls occurred except those which were heard in the vicinity of the nest around feeding time. In most cases the quiet period proved to be about the last week of incubation. These calls were short, low "bob-whites" and were found to be definitely tied up with the hen leaving the nest and joining her mate (on no occasion were cocks noted to leave their waiting site to meet the hen). In one instance the hen answered these calls with a very low "bob-white", after leaving the nest. This hen first came to the roadway and dusted along the edge. During one observation the hen dusted eight times in a distance of less than 75 feet before crossing the road to her mate's waiting station. Upon arrival of the hen considerable "quail talk", believed to be that of the cock, was heard. Shortly after their meeting they moved off for what proved to be feeding and dusting. At the slightest disturbance the hen darted into the cover. The cock did not follow and on occasion was heard calling in a low note. In only one instance was a hen ever observed to go to a source of water during the recreation period.

HATCHING

The period of hatching required only a short time. Four of 12 eggs were pipped in one nest at 10:00 a.m., and at 4:00 p.m. all the chicks had hatched except one which was still alive but unable to free itself from the shell. On another occasion a nest was checked late in the afternoon and found to contain two pipped eggs. When it was revisited the following day at 7:30 a.m., chicks and adults had already left. Four unhatched eggs that remained in the nest contained weakened chicks, apparently unable to pip the shell. The new brood was located approximately 100 yards from the nest which indicated that little time was lost in leaving the nesting site.

In some instances the shells of unhatched eggs were found outside the nest, but more often they remained in it. Stoddard (1931) found that when the chicks were brooded in the nest overnight the shells were usually pushed out.

LITERATURE CITED

- Fletcher, L. R.
1946-1947. Monthly reports. U.S. Dept. Agri. Weather Bur. Iowa Sect. 57:1-143, 58:1-158.
- Nestler, R. B., and Bailey, W.
1941. Bob-white Quail Propagation. U.S.D.I. Conservation Bul. 10, 50 pp.
- Stoddard, H. L., and others.
1931. The Bob-white Quail; Its Habits, Preservation and Increase. Charles Scribner's Sons, New York, 559 pp.

OUR DAVENPORT FIELD TRIP IN MAY

By THOMAS MORRISSEY
DAVENPORT, IOWA

Davenport has been selected as the site of the 1950 convention of the Iowa Ornithologists' Union. This article is intended to acquaint our members with the region they will visit in May, with the idea that an introduction to the natural history of an unfamiliar area will be rewarding to the newcomer. But this is also an advertisement, for we Davenporters are proud of the region in which we live and we want to share the attractions with as many of the State's bird students as possible.

The Davenport area (arbitrarily, Scott County) is a plateau bounded on the east and south by the Mississippi River and on the north by the Wapsipinicon River. In the north, the uplands roll gently down into the broad valley of the Wapsie. On the east and south, however, the drop is more abrupt and in some places steep bluffs rise from the shore of the Mississippi. The creeks which drain the upland are in most places slow and muddy, but where they flow into the Mississippi they cut beautiful ravines in the limestone which forms the walls of that river's valley. The plateau itself—which constitutes the greater part of the Davenport area—shows practically no change in elevation. Most of the county was at one time prairie, but since it was settled early only a few scattered patches of the original prairie sod remain. The forests which covered the bottomlands and bluffs of both rivers have fared a little better. Two sizable forests are still to be found. The bottomland forest forms a long, narrow, almost continuous strip bordering both of our rivers. It is characterized by white oaks, redbud, sycamore, and other moisture-loving trees. The upland forest area is best developed in the northwest corner of the county where bur oaks, red oaks, hickories, and other trees of well-drained land form a dense stand.

The best way to understand our area is to see it at first-hand and a cross-county field trip will be an important item on the convention's schedule. We can start before dawn in the cat-tail marshes just south of the city-limits of Davenport. There we shall record our first King Rails and Sora and, with the coming of light, Short-billed and Prairie Marsh Wrens. No ducks are at this marsh. The dense stand of cat-tails doesn't suit them. Almost any of the common marsh birds will turn up here, however, and it's possible to find the rarer ones such as Least Bitterns and Nelson's Sparrow.

But we'll be in a hurry to move up-river to Credit Island. The island is about 2 miles long and half a mile wide. It is part of the City Park System and the favorite birding spot in the area. Along one side of the island is the harbor. Here we'll find the remnants of the big April flocks of Scaups, Ring-necks, and other diving ducks. There will be Great Blue Herons and American Egrets and Night Herons stalking fish in the shallow water. Some of us will be startled by the cries of Wood Ducks as they spring from the willow-bordered shore. If the water in the harbor has receded to leave mud-flats, we shall really be in luck. Last year 14 species of shore-birds visited these flats including such rarities as Black-bellied Plovers, Dowitchers, and Red-backed Sandpipers. Moving down the island into the thick forest we begin to meet the summer residents of the bottomland forest. Many of them are nesting.

Here we find titmice, chickadees, nuthatches, and five species of woodpeckers. Prothonotary Warblers, Redstarts, Red-eyed and Warbling Vireos. Certain species such as the Prothonotary Warbler, Bewick's Wren, Red-shouldered Hawk, and Barred Owl are confined almost exclusively to this lowland forest. But we are more likely to be interested in the myriads of



ONE OF THE DRIVES ON CREDIT ISLAND
Reprinted from "Iowa Bird Life", Sept. 1945.

small birds at ground level, in the low river birches, or high overhead in the white oaks, all of them migrants here just for the space of a day. Last year in mid-May we found 17 species of warblers in one day and 23 during the entire season. Over on the south side of the island we can look out over the channel of the Mississippi to find Herring and Ring-billed Gulls, Caspian and Black Terns. And there is always a chance to see hawks as they cross from the Iowa to the Illinois shore.

There is a long drive ahead. We must continue up the River for 20 miles to the marsh which lies outside the village of Princeton. We'll have the Mississippi on our right all the way up and we'll pass through some beautiful scenery. It will be a good opportunity to record some of the common birds we find along every roadside: Eastern Meadowlarks, Grackles, Sparrow Hawks, and Kingbirds. The marsh is a grassy meadow which floods almost every spring. It is separated from the river by a tree-covered dike which affords easy access; on the other side of the marsh there is a railway embankment which offers a good point for observation. The three-mile-long body of water will be spotted with ducks—just reminders of the tens of thousands here earlier in the spring. But we should be able to find, Mallards, perhaps with broods of young, Pintails, Gadwalls, Baldpate, Shoveller and many Blue-winged Teals. There should be many shorebirds and as we search for Willets and Godwits we are certain to find bunches of Greater and Lesser Yellow-legs grazing in the grassy puddles. We'll hear American Bitterns pumping and listen to the chatter of grebes and coots. With great good luck a Pileated Woodpecker may be found in the dead timber at the east side of the marsh, where Tree Swallows and Prothonotary Warblers breed in numbers.

Leaving the marsh we turn westward parallel with the Wapsie River. Soon we begin to run into sandy stretches which turn into sand dunes as we

continue. Lark Sparrows appear, and the Western Meadowlark completely supplants the Eastern form. The vegetation is strikingly different with plants like the golden aster and puccoon replacing the common weeds of other roadsides. The birds are different, too. A Mockingbird may appear and Horned Larks are everywhere.

We are soon out of the dunes and into the rich valley of the Wapsie. Here the soil is poorly drained and if the weather has been wet, we may have located some "sky-ponds" (temporary ponds in fields) in advance. We need not even leave the automobiles to watch Golden Plovers, Wilson's Phalaropes and their lesser brethren. Bobolinks, Grasshopper, and Savannah Sparrows wing from the grasses of this rich valley, and in the shorter grass of the pastures Upland Plovers may be feeding.

In the northwest corner of the county, in Allen's Grove township there is a forest covering five square miles. It is an oak-hickory forest quite different from that of the lowland. The birds are different from those of the lowland. Red-tailed Hawks and Great-Horned Owls replace Barred Owls and Red-shouldered Hawks. Scarlet Tangers are common and so are Yellow-throated Vireos. Where the original forest has been destroyed Field Sparrows now take up residence. But most of the forest has not been touched, and even if the birds are somewhat less numerous and more difficult to find, the abundance of and variety of wild flowers makes this part of the trip most interesting.

By the time we have visited Allen's Grove it is time to turn back toward the city. We shall have seen a great many birds (a trip over this same route last May produced 98 species for just two observers) and we may have picked



A BIRD'S-EYE VIEW OF CREDIT ISLAND
Good birding grounds to be enjoyed at the Davenport convention.



A SCENE ON THE MISSISSIPPI NEAR DAVENPORT
Reprinted from "Iowa Bird Life", Sept. 1945.

up some information on the ecology of Iowa birds—how difference in soil and vegetation affect their distribution.

As we bring our field trip and our annual meeting to a close we hope you too will feel kindly toward our area and leave with a sincere promise to come back soon.

THE DAVENPORT MUSEUM COLLECTIONS

By RICHARD SCHAEFER
DAVENPORT, IOWA

Those who attend the 1950 Iowa Ornithologists' Union convention in Davenport in May will have an opportunity to view rare and extinct birds that almost certainly won't be checked on their field cards. No, we have not found a hidden valley of virgin timber and prairie in Scott County—we are referring to the mounted specimens on display at the Davenport Public Museum, convention headquarters.

Outstanding examples of Iowa's former bird life to be found in the Museum's cases are Eskimo Curlews, Whooping Crane, Passenger Pigeons and Carolina Paroquet. Of course, these birds have been in the Museum's collection for many years and their donors were among the first active bird students in the former Davenport Academy of Science. The names of Dr. W. A. Allan, W. C. Putnam, J. H. Paarmann, and C. A. Ficke appear most frequently as contributors. These men also gave to the Museum many specimens of more common birds, and their notes in connection with these species have shown the variations of abundance during the passing years.

Besides the collection of North American birds, the Museum has a large number of South American and Asiatic birds: toucans, kingfishers, humming-birds, orioles, tanagers, and an Ivory-billed Woodpecker. Most of these birds were the gift of C. A. Ficke.

The Museum has also a small but growing collection of skins of local birds. Several authorized birders, with the required permits, are making occasional contributions to the collection and it is hoped that a representative series of Scott County birds can some day be completed. Recently Thomas Morrissey presented the Museum with a collection of warbler skins taken in the Quad-City area. Fred T. Hall, Museum director, has gathered many specimens during his travels in the eastern U.S. and these will also be displayed during the convention.

THE DAVENPORT ACADEMY OF SCIENCES: ITS CONTRIBUTION TO IOWA ORNITHOLOGY

By JAMES HODGES
DAVENPORT, IOWA

The path of progress is usually marked by the rise and fall of various organizations. As the solvent of time eats into the core of different organizations, some fade into history, others continue on the path of progress, and some remain in a semi-dormant stage. It is an organization of perhaps the last-named type that I would like to describe here. This is the Davenport Academy of Sciences. I would put particular emphasis on its contribution to the ornithology of Iowa. Today this organization is known as the Davenport Public Museum.

On the 14th of December, 1867, a few individuals who had devoted their leisure hours to the study of Nature, organized the Davenport Academy of Sciences. Beginning with but four members, the number had increased to fifty-four at the end of 1868. During the winter of 1868-1869 the meetings were well attended and considerable interest was shown in the work of the Academy. Several papers of general interest were presented and discussions rendered the meetings both entertaining and instructive. It was not long until a display cabinet was started for natural curios. A telescope was purchased and the meteoric shower of November 13, 1868, was observed and recorded. The next year was mainly occupied in making preparations for observing and photographing the total eclipse of the sun on August 7th, 1868. These same optical instruments remain in the Museum. Thus the Academy took its first steps. It should be kept in mind that the membership was rather limited. The city of Davenport was only 40 years old at the time the Academy was organized, though it was a thriving commercial and manufacturing center of about 25,000 inhabitants. It was still semi-frontier, situated on the west bank of the Mississippi and in the heart of an extensive grain-growing region.

The meeting place of the Academy was changed from one place to another, because the collections rapidly outgrew their allotted space or other conditions were unsatisfactory. The final home of the Academy was erected in 1877 on Brady Street hill.

The area of Davenport has a lure for the student of nature. The preface in Volume one of the "Proceedings" of the Academy recorded: "The underlying limestone abounds in fossils for the Hamilton and Upper Helderburg groups, the rivers and ponds produce a remarkably fine development of

molluscan life, while the close proximity of the prairies to the wooded bottom lands, affords a rich field for the botanist and the entomologist. This region was once the residence of a prehistoric people, who have left many obscure traces behind them, furnishing an abundance of material for the archaeologist to ponder over." The reader will notice that no mention was made of bird life. This seems strange for the birds certainly must have forced themselves on the attention of these ardent students of nature. It is difficult to imagine not even one person roaming the prairies and stands of virgin timber, wading through the many sloughs or wandering along the banks of the Mississippi, searching for birds that twice a year follow this central fly-way! This was a bleak beginning for the institution which was to publish the first two lists of the birds of Iowa. The first three volumes of the "Proceedings" indicate this to be quite true as the majority of the papers dealt with botany, archaeology, entomology, and the mollusca.

Upon the excavation of numerous Indian mounds and the publication of the results, the Academy began to gain prominence in the scientific world.

During the April meeting in 1887 the director of the Academy, J. D. Putnam, said in his annual report: "It is in zoology that we feel the greatest need of more active workers. Strange as it may seem, we have practically no definite knowledge whatever of the vertebrates found in this vicinity. Nothing like a complete list has ever been attempted. A small number of stuffed birds and mammals are contained in the museum of the Academy, but they are not determined or labeled, and are in danger of being destroyed by the insects for want of proper cases to receive them." It is significant to note that the membership list published in 1887 contained the names of four distinguished ornithologists: J. A. Allen, Spencer F. Baird, Elliott Coues, and Robert Ridgway. When the list of the year's donations to the Academy was published, all birds were listed as "stuffed birds," or as "a duck." The nearest they ever came to the designation of a species was, "A white owl from Haypole, Nebraska."

On December 30, 1887, a paper was read before the Academy by Charles R. Keyes and H. S. Williams entitled, 'A Preliminary Annotated Catalogue of the Birds of Iowa.' This was the first formal report concerning bird life in the Proceedings of the Academy. It was published in Volume V in 1889.

The next step that the Academy took in the way of bird study was the election to membership of J. H. Paarmann on January 26, 1901. At the next regular meeting, held on January 28, 1901, the President was given the power to employ a zoologist to identify and arrange the collection of birds. It is mentioned in the October minutes of the same year that J. H. Paarmann was employed in this capacity. On April 16, 1902, he was appointed Curator of the Academy at a salary of \$900 per year. The next year he drew \$1000. Though Paarmann was a general zoologist, he did arouse interest in bird study in the Davenport area by presenting lectures on bird life before school groups and social organizations. The one most repeated was on "Coloration and Habits of Birds." In 1903 the Academy published a four-page pamphlet on the birds of Davenport and vicinity compiled by Paarmann. This work shows a lack of general knowledge of the bird life on the part of the author. The Academy soon discontinued the publication of its Proceedings, but as in previous years continued to publish larger papers of note. Among the few thus published was the second list of Iowa Birds by R. M. Anderson. This appeared in 1907 as Volume XI of the Proceedings.

In 1927 the Academy name was changed to the Davenport Public Museum, which today retains the original building on Brady Street Hill.

TENTATIVE PROGRAM OF THE 1950 DAVENPORT MEETING

FRIDAY EVENING, MAY 12

8:00 P.M. At the Davenport Public Museum, 704 Brady St. Special lecture program.

SATURDAY MORNING, MAY 13

4:00 A.M. 25th annual "May Dawn Bird Concert", sponsored by the Davenport Public Museum. Rendezvous in front of Credit Island Inn, followed by hikes around the Island.

6:30 A.M. Breakfast. Reports of birds seen and a short talk.

8:00 A.M. Choice of several hikes with leaders familiar with this locality.

12:30 P.M. Registration at Davenport Public Museum (Rotunda). Museum exhibits, special bird exhibits. An exhibit of original paintings by Louis Agassiz Fuertes, and the Bird Photograph Contest entries will be on display. There will also be commercial exhibits and a display of books on Natural History.

2:00 P.M. Business meeting, followed by papers.

6:30 P.M. Banquet in the Gold Room, Hotel Blackhawk. Program of light entertainment, followed by Dr. Alfred M. Bailey, director of the Denver Museum of Natural History, presenting his new full-color program, "Stepping Stones Across the Pacific." This movie features the concentrations of birds on Midway, Wake and other Pacific islands.

SUNDAY, MAY 14

5:00 A.M. Meet in front of Davenport Public Museum for field trips. The group will be divided into as many sections as necessary and each section will have a leader familiar with the area. All groups will concentrate on different spots along this tour. Transportation will be provided for those without cars.

1:00 P.M. Lunch, with compilation of bird list.

2:30 P.M. Migration (a field trip extension will be provided for those with time and energy remaining).

COMMITTEES

Resolutions: Dr. Alfred W. Meyer, Cedar Rapids, Chairman; Miss Irene M. Smith, Des Moines; Harry G. Carl, Davenport.

Rules Governing Unusual Birds Seen on Field Trips: Dr. Martin L. Grant, Cedar Falls, Chairman; Dr. F. L. R. Roberts, Spirit Lake; Charles C. Ayres, Jr., Ottumwa.

To Organize a Campaign Against Destruction of Bird Life: Mrs. Harold R. Peasley, Des Moines, Chairman; Miss Zell C. Lee, Sioux City; Miss C. Esther Copp, Cedar Rapids; Jack W. Musgrove, Des Moines; Dr. J. Harold Ennis, Mt. Vernon.

THE 1949 CHRISTMAS BIRD CENSUS IN IOWA

Compiled by FRED J. PIERCE

The Christmas bird census in Iowa was again a decided success. A desire to see the winter birds and to participate in an annual event that is now almost nation-wide, drew 124 Iowa people from 19 stations into the field during the Christmas week.

As usual, the tabulated report gives a fairly complete index to the winter bird life over the entire state, and is worth a careful study. The absence of certain birds, such as Winter Wren and Meadowlark, will be apparent at once, while numerous other species, occurring here and there as stragglers in the winter season, furnish unusual records. In 1949, 19 species were reported from one station only, and 9 species from two stations only. Downy Woodpecker, Blue Jay, Crow, Chickadee, Slate-colored Junco and Tree Sparrow were the only species recorded at all 19 stations. There was a definite "wave" of Snowy Owls into Iowa during the past winter. We were sorry that no one found this species on a census trip.

Our policy has been to list the Rock Dove only where it is living in a natural state. Several persons listed this bird, but in the absence of information stating that it was living in natural habitat, we did not include it. Most persons followed closely the pattern of former published censuses, which was helpful to the editor. One census had to be omitted because the lists of two days were combined into one.

Data on place, time, weather and the observers who reported in the 1949 census are given below.

1. ATLANTIC (city cemetery, Sunnyside Park and vicinity, Lewis Cemetery, Cold Springs State Park; deciduous woodland 40%, coniferous groves 50%, open fields 10%): Dec. 29; 9 a.m. to 5 p.m. Clear; wind NW, 5 m.p.h.; temp. 16° to 38°; total miles, 6 on foot, 16 by car. Observers in one group. Anne Barnard, Gene Ruhr, Robert Alexander, Norman Hansen, Charles Mallette, Don Bice (Atlantic Bird Club).

2. BACKBONE STATE PARK (Delaware County): Dec. 26; 9 a.m. to 5 p.m. Clear; some snow on ground; light S wind; temp. 5° to 25°; about 4 miles on foot, 50 by car; trip included an auto ride from Winthrop to the park and return by a different road, with roadside list included in the census. Observers together most of the time, or working in pairs. M. L. Jones, Earl Freeman, Paul Pierce, F. J. Pierce.

The Vesper Sparrow was seen by the roadside, studied under favorable conditions; white tail feathers and other points noted.

3. CEDAR FALLS (Josh Higgins Park, Snag Creek, Washington Union Bridge area, Hartman Reserve; open woodlands 80%, dense deciduous timber 10%, river bottom 10%): Dec. 30; 8 a.m. to 3:15 p.m. Cloudy; crusted snow on ground in a.m., thawing in p.m.; most fresh water open; wind SE, 10 m.p.h.; temp. 30°-40°; total party miles, 38 on foot. Observers in one party. Dr. Emery Wills, Dr. C. W. Robertson, George Faulkner, Russell Hays, Frances Crouter, Maybelle Brown, Mrs. Russell Rugg.

4. CEDAR RAPIDS (Cedar, Swan, Chain and McBride Lakes, Bever and Ellis Parks, Lewis bottoms, Prairie Creek woods, Manhattan Mound, Willis Farms and roadsides intervening): Dec. 18; 8 a.m. to 5 p.m. Misty in a.m., cleared in p.m.; wind NW; temp. 28°-34°; 15 miles afoot, 165 by car. Observers in four parties. Emma Doornink, Fred Kent, Tom Kent, Dr. and Mrs. Peter Laude, Dr. Alfred Meyer, Knute Nomland, E. J. Petranek, Maj. Robt. Petranek, Rose Richards, Lillian Serbousek, Mr. and Mrs. E. W. Steffen, Ed Thatcher, Dick Turner, Dr. and Mrs. Robt. Vane, Myra Willis.

5. DAVENPORT (Credit Island): Dec. 26; 11:30 a.m. to 3:30 p.m. Clear; light snow on ground; Mississippi River partially open; no wind; temp. 30°; considerable time spent watching 8 suet feeders and 3 grain feeders which we had put on the island. Harry G. Carl.

6. DAVENPORT (Giddings woods, Credit Island, McMannus woods, Holy Family Cemetery, Stubbs woods, fairgrounds, Cedar St. Creek woods, Fedj woods and Park): Dec. 24; 7:30 a.m. to 3:30 p.m. Clear; ground covered with ice and snow from storm of previous day; Mississippi River frozen with exception of channel; light wind; temp. 22° at start, 36° at return; 14 miles on foot. James Hodges.

7. DES MOINES (Fisher's Lake, Sycamore Park, Dove Woods, Pine Hill Cemetery, 28th St. Sanctuary, Impounding Reservoir, Walnut Woods State Park, Chas. Sing Denman Woods, Des Moines River bank in vicinity of 6th St. bridge; open fields 35%, wooded streams 35%, lakeside 30%): Dec. 26; 8:30 a.m. to 5:30 p.m. Clear; 1 to 2 in. snow on ground; some open water in running streams and Impounding Res.; wind SE, 2 m.p.h., to SSE, 9 m.p.h.; temp. 8° to 26°; total party hours, 25 (20 on foot, 5 in cars); total party miles, 70 (18 on foot, 52 in cars). Seventeen observers in 4 parties. Ruth Binsfeld,

Dorothy Anderson, Irene Smith, Joe K. Brown, Helen Peasley, Bruce Stiles, Dr. Ed Kozicky, Mr. and Mrs. Lester Haskell, Olivia McCabe, Toni Wendelburg, A. C. Berkowitz, Mr. and Mrs. J. P. Moore, Geo. McGill, Mary Ellen Warters, Woodward Brown.

8. DUBUQUE (Linwood and Mt. Calvary Cemeteries, Eagle Point Park, City Island, Mississippi River sloughs in Wisconsin; open fields 10%, pine woodlands 15%, deciduous woodlands 40%, river sloughs 35%): Dec. 26; 8 a.m. to 4:30 p.m. Clear; 1 in. crusted snow on ground; river open $\frac{1}{2}$ mile below dam; light breeze; temp. 10° to 25° ; total hours, $7\frac{1}{2}$ ($6\frac{1}{2}$ on foot, 1 in car); total miles, 12 (7 on foot, 5 by car). Observers together. Frieda and George Crossley, David Reed, Howard Hintz, Howard Lampe, Lois Lampe, Anita Ayala, Janet Birch (Dubuque Audubon Club).

9. EMERSON (town, thin woodland with heavy undergrowth along Indian Creek and small tributaries east of town, open farm land, Hillside Cemetery north of town): Dec. 28; around residence in town in a.m., 1:30 to 5:30 p.m. Clear; ground partly snow-covered; creeks frozen; brisk SW wind, dying in late p.m.; temp. high 48° , low 35° ; 5 miles on foot, 6 by car. E. R. Birdsall.

10. LAMONI (Big Creek south of city; $1\frac{1}{2}$ miles on foot): Dec. 25, 10:30 a.m. to 3 p.m. Cloudy all day; light snow on ground; creeks frozen but running water in places; temp. 39° at start, 23° at return. Mrs. W. C. DeLong, Richard DeLong.

11. MOUNT PLEASANT (Saunders Grove, stone quarries south to Big Creek): Dec. 29; 7 to 11:30 a.m. Cloudy; very light wind; temp. 10° to 25° ; 4 miles on foot. Roy Ollivier, Joseph Schaffner.



A WINTER MOURNING DOVE

This bird often remains in Iowa during the winter, if sufficient food can be found. It was reported from four stations on the Iowa bird census. Photograph by Jim Sherman, published by courtesy of the Iowa Conservation Commission.

12. NEW PROVIDENCE (territory in vicinity of Honey Creek, along $3\frac{1}{2}$ miles of its length, south and west of town; deciduous woodland 70%, open farmland 25%, farmsteads, evergreen groves and yards 5%): Dec. 27; 7:20 a.m. to 12:30, 2:30 to 5:30 p.m. Clear to partly cloudy; 2 in. snow on ground; all streams frozen but thawing in p.m.; wind W, 3-15 m.p.h.; temp. 15° to 36° ; 9 miles on foot. Observers together. Beth, Richard and Philip Clampitt.

13. NEWTON (Westwood Park, south along Cherry Creek to South Skunk River below Metz for 2 miles; open farmland 40%, timbered creek bottom 20%, elm-timbered river bottom 40%): Jan. 2; 8 a.m. to 5 p.m. Very heavy fog all day, with visibility from 100 ft. to $\frac{1}{2}$ mile; light snow on ground, mostly gone by night; river open; Wind WSW, 1-5 m.p.h.; temp. 35° to 40° ; total miles, 10 on foot. Observers together. John Paul Moore, Jim Gaylor, Konnie and Mas Yoshinaga.

14. RED OAK (and near Stanton; 1 hour of early morning observation at backyard feeding-station in Red Oak; auto ride to a farm in East Township, with return by different route; rough pasture, open woodlands, along branch of West Nodaway River): Dec. 29; 8 a.m. to 12. Clear; snow patches on ground; river frozen; wind ESE, light; temp. 15° to 35° ; 3 hours on foot, 1 in car; 3 miles on foot, 28 by car. Observers together most of the time. Olney G. McIntosh, Ramona C. Pickering, Mr. and Mrs. Lawrence J. Pickering.

15. SIOUX CITY (War Eagle woods and adjacent areas, confluence area of Missouri and Big Sioux Rivers, Riverside Woods and Park, Stone Park Road, Stone Park, Plum Creek and Talbot Roads, Logan Park, Brown's Lake area to Missouri River, Bacon Creek Hollow, Grandview Park, South Ravine, Graceland Park Cemetery, Morningside Nurseries, Westside, Northside and other areas within city; deciduous timber and park areas 40%, river and lake country 25%, open country 25%, city and suburban areas 10%): Dec. 26; 7:30 a.m. to 4:30 p.m. Clear in a.m., becoming cloudy in p.m.; ground mostly bare; Missouri River frozen except in main channel, Big Sioux River open below gas plant; wind 5 m.p.h. in a.m., increasing to 10 m.p.h. in p.m.; temp. 3° to 35° ; total party miles, 33 on foot, 127 by car. Observers in 19 groups. Herrold Asmussen, Mr. and Mrs. W. W. Barrett, H. M. Edwards, Mrs. E. A. Emery, Mrs. O. J. Follett, R. D. Hissong, Bob Jensen, Holger Jensen, Warren Jensen, Jean L. Laffoon, Mr. and Mrs. Howard Lambert, Jim and Mary Lambert, Zell C. Lee, Alice Loeffler, Mrs. A. B. Madsen, Geo. Marsh, Jeanette Marsh, L. Nickolson, Bob Nickolson, I. G. Nore, Gladys Palmer, Grace Brainerd, Mrs. Robt. Pike, Mrs. Lillian R. Smith, Mrs. J. F. Wilson, Fred Strange, Mrs. Julia Schott, Dean Swearingen, Gertrude Weaver, Carl Wellhausen (Sioux City Bird Club and guests).

16. SIOUX CITY (Missouri River bottoms below city, on into Little Sioux River valley at Grant Center, up the valley to Anthon, and from there to Sioux City): Dec. 26. Clear part of day; 30-m.p.h. wind; 91 miles by car. Wm. Youngworth.

17. TAMA (auto trip of 40 miles through wooded areas and farm lands): Dec. 30. Cloudy; no wind; temp. 20° . Mr. and Mrs. W. G. MacMartin.

18. VINTON (woods NW of city in a.m., woods at mouth of Lime Creek north of city, country south of city and Vinton Cemetery in p.m.): Dec. 30; 9:30 a.m. to 4:30 p.m. Mostly clear with light clouds at intervals; very little snow left, with fields muddy and water running; light S wind; temp. 25° at start, 45° at noon, 40° at return; about 5 miles on foot, 40 by car. Observers together. Earl Freeman, Paul Pierce, F. J. Pierce.

19. WAPELLO LAKE (at Boy Scout camp in Davis County): Dec. 26; 11 a.m. to 12, 2:30 to 4 p.m. Clear; no wind; temp. 20° - 40° ; 1 mile walk. Observers together. Chas. C. Ayres, Jr., Harold Judd, Wm. Hoskins, Jack Condor, Herbert Klontz, two Brunk brothers.

	1. Atlantic	2. Backbone Park	3. Cedar Falls	4. Cedar Rapids	5. Davenport (Carl)	6. Davenport (Hodges)	7. Des Moines	8. Dubuque	9. Emerson	10. Lamoni	11. Mt. Pleasant	12. New Providence	13. Newton	14. Red Oak	15. Sioux City (Bird Club)	16. Sioux City (Yrworth)	17. Tama	18. Vinton	19. Wapello Lake
Double-crested Cormorant				26				1											1
Mallard							4000												
Black Duck				40															
Baldpate																			
Pintail							16												
Lesser Scaup					34	10		4											
American Golden-eye				5		2													
Ruddy Duck							1												
Hooded Merganser							12	16											
American Merganser					14	1													
Sharp-shinned Hawk				1		1													
Cooper's Hawk						1													
Red-tailed Hawk	2			12		1				2		4	1	1	3	6	4	1	1
Red-shouldered Hawk			2		3	1	5	1						1					
Broad-winged Hawk				1								2			2	11	3	1	2
Rough-legged Hawk	1	4		6		4		6											
Bald Eagle																			
Marsh Hawk	1			4			1								1				
Prairie Falcon																			
Sparrow Hawk				6			3		1								3		
Bob-white				13			12			18									
Ring-necked Pheasant	1	70	2	14					5	1		28	1		6	1	4	2	1
American Coot							7				2								
Wilson's Snipe					405	8													
Herring Gull				1		2		7											
Ring-billed Gull																			
Mourning Dove				19					1	12					2		2		
Screech Owl			1				1					2							
Great Horned Owl									1			2	1		1			2	1
Barred Owl		1	4	2		2	2	2		1									
Long-eared Owl			1				1			1									
Short-eared Owl		2		16			2		1										
Saw-whet Owl								1											
Belted Kingfisher		1	1	1					1										
Flicker	10		1	1		1	25	2	1	2	1			2	1	9	2	4	3
Pileated			1																
Red-bellied Woodpecker		2	2	11	2	6	11	5	2	2	3	10	4	1	4		2	6	2
Red-headed Woodpecker				7	2	3		2		9	1				1		1		

CHRISTMAS BIRD CENSUS

19

	1. Atlantic	2. Backbone Park	3. Cedar Falls	4. Cedar Rapids	5. Davenport (Carl)	6. Davenport (Hodges)	7. Des Moines	8. Dubuque	9. Emerson	10. Lamoni	11. Mt. Pleasant	12. New Providence	13. Newton	14. Red Oak	15. Sioux City (Bird Club)	16. Sioux City (Yngworth)	17. Tama	18. Vinton	19. Wapello Lake
Yellow-bellied Sapsucker																			
Hairy Woodpecker	3	4	8	1	2	1	12	2	1	1	1	9	1	1	21	4	3	5	1
Downy Woodpecker	8	6	12	29	3	12	28	16	4	3	7	26	16	5	50	8	8	12	2
Horned Lark																			
Blue Jay	15	18	15	36	4	8	23	22	5	2	15	13	2	2	30	2	8	15	22
American Magpie																			
Crow	7	50	25	39	7	9	48	43	2	2	4	10	6	1	12334	1000	10	52	4
Black-capped Chickadee	60	21	40	118	5	12	76	17	9	16	20	65	12	25	267	15	23	30	15
Tufted Titmouse	16	19	13	16	2	1	31	3	2	8	6	8	4	10	4	3	3	12	3
White-breasted Nuthatch	5	12	25	29	3	4	22	11	3	7	24	5	2	49	1	6	12	15	5
Red-breasted Nuthatch	3																		
Brown Creeper	8	1	6	5	1	1	5	3	1	1	1	1	1	2	26	1	2	1	
Brown Thrasher																			
Robin																			
Bluebird																			
Golden-crowned Kinglet	8		1	2		2	8	4	1						3		5	6	2
Cedar Waxwing																			
Northern Shrike																			
Starling	12	40	1	242	300	5	41	19	40	18	6	3		8	216	500	30	15	5
English Sparrow	35	200	60	220	48	1000	350	189	20	48	18	150	125	150	1718		500	100	15
Rusty Blackbird																			
Bronzed Grackle																			
Cardinal	12	17	8	70	2	7	103	30	1	16	60	4	14	5	51		7	20	2
Purple Finch																			
Common Redpoll																			
Pine Siskin																			
Goldfinch	12	1	2	38			35	2	5	3	15	2			12		2		1
Vesper Sparrow																			
Slate-colored Junco	100	15	35	96	6	9	150	30	14	72	36	25	8	30	245	20	15	25	20
Tree Sparrow	10	250	100	113	2	10	303	68	30	68	28	22	5	80	107	100	16	50	25
Harris's Sparrow	10																		
Song Sparrow																			
Snow Hunting																			
Number of Species	22	22	23	38	21	26	42	33	21	21	18	19	18	18	30	15	25	20	23
Number of Observers	6	4	7	18	1	1	17	8	1	2	2	3	4	4	33	1	2	3	7

*See data under station in body of article.
Total Iowa list 71 species.

SNOWY OWLS, WARBLERS, AND SWALLOWS ON THE SAME CHRISTMAS CENSUS

By MARTIN L. GRANT

Iowa State Teachers College,
CEDAR FALLS, IOWA

It was the privilege of the writer, in company with Dr. J. Harold Ennis, past-president of the Iowa Ornithologists' Union, to take a field trip to Jones Beach, Long Island, N.Y., on Dec. 30, 1949, as a part of the annual meeting of The American Nature Study Society in connection with various other organizations affiliated with the American Association for the Advancement of Science. The identification of the birds seen can be presumed to be fairly reliable, inasmuch as the leaders of the party of about 80 people included Roger Tory Peterson, Edwin Way Teale, Richard H. Pough, Richard L. Weaver, and E. Laurence Palmer.

The sky was clear, temperature about 20°F., wind SE at about 15 m.p.h., with about a half-inch of snow on the ground and the ponds about two-thirds frozen over. All observations were made in open treeless (except for small introduced pitch pines) beach-dune areas, on the Long Island sand-spit, south of Great South Bay, ocean (south) side, and in the ponds and marshes just to the north, at Jones Beach and east, covering an area about 15 miles long and a half-mile wide. Time: 10 a.m. to 3 p.m., Dec. 30, 1949.

The birds seen by the writer, with estimates of numbers of individuals, were: Canada Goose, 50; Mallard, 2; Black Duck, 75; Gadwall, 2; Pintail, 30; Green-winged Teal, 35; Shoveller, 4; Red-breasted Merganser, 1; Marsh Hawk, 12; Sparrow Hawk, 1; Herring Gull, 500; Ring-billed Gull, 100; Great Black-backed Gull, 1; Snowy Owl, 3; Horned Lark, 50; Tree Swallow, 30; Starling, 75; Myrtle Warbler, 35; Tree Sparrow, 20; and Song Sparrow, 4. Total: 20 species, and 1030 individuals. In addition, three dead Dovekies were picked up along the beach. A Goshawk was reported, but not seen by the writer. No attempt was made to search out the more common birds of the general region.

Most of the gulls were on or over the open ocean, and the ducks and geese were sitting on or flying between the marsh-ponds in Great South Bay.

The presence among the beach dunes of great numbers of bayberries (*Myrica carolinensis*) was responsible for the occurrence of the Myrtle Warblers and the Tree Swallows, both of which feed here in winter on the waxy white berries of this common, low, coastal-plain shrub. The warblers spent much of their time in the planted small trees and shrubs in the area, and were rather uniformly scattered around, but the swallows formed a single flock, perching in cattails and the very abundant reed-grass (*Phragmites communis*) in the marshes. Mr. Peterson said it was the largest flock of swallows he had ever seen that far north in the winter. Both species have been known to stay all winter in such situations along the North Atlantic Coast.

In walking and riding back and forth through the area five Snowy Owls were seen, but allowing for undoubted duplications probably only three individuals were present. All were found sitting directly on the ground, on the tops of the highest dunes, about 20 feet above sea-level, and 100 yards in from the ocean, so that their heads could be picked out against the skyline. It was possible to approach to within about 25 yards before they took flight. One was flushed three times, flying for 200 or 300 yards, and pellets containing the bones of two rabbits were found at the first site. The only other mammal observed in the region, on which they might be feeding, was the common meadow mouse, several of which were easily scared out of the beach grass (*Ammophila arenaria*) and beard-grass (*Andropogon glomeratus*) areas. All

three of the owls had the dark brown barring of young birds; at least no adult males (often pure white) were seen. According to the leaders, some Snowy Owls had been in the area for two weeks or so.

GENERAL NOTES

Carolina Wren Breeding in Clinton County.—Because Clinton County has never been worked by bird students, it may be well to record that I found a Carolina Wren nesting on June 26, 1949, near Wheatland. This species is not too common as a breeder in this vicinity.—JAMES HODGES, Davenport, Iowa.

Brown Thrasher Winter Record.—On Christmas Day, 1949, after roaming the woods in search of possible winter rarities, I was returning home when at the edge of Waterloo I saw a large, long-tailed bird. This on close examination proved to be a Brown Thrasher. I was certainly surprised to see this bird and can not explain why it remained so late—perhaps waiting for an injury to heal.—RUSSELL HAYS, Waterloo, Iowa.

Cardinals at Spirit Lake.—There were at least seven Cardinals in our Lakes Region during the past winter. However, we usually failed to see any on our field trips. Cardinals have extended their range from the south. As they are not likely to travel far over open prairies, their progress north has been along wooded streams for a number of years. They have been more plentiful at St. Paul, Minnesota (where we frequently visit) than in our district.—DRS. FRANK AND MARY ROBERTS, Spirit Lake, Iowa.

Snowy Egret in Scott County.—On August 5, 1949, two Snowy Egrets were found in the Nahant marsh area in Scott County, Iowa. On August 6 they were absent from this area but two were found at Credit Island, about three miles distant. Several other observers have informed me that they have observed a few other individuals within a 50-mile radius. Perhaps this is an indication that the bird is increasing and will follow the pattern of increase of the larger American Egret.—JAMES HODGES, Davenport, Iowa.

Christmas Census at Davenport, Iowa.—DAVENPORT (Credit Island and surrounding woods, Lock 14, Duck Creek Park, Fairmount Cemetery, country roads north of city): Dec. 30; 7:30 a.m. to 4:30 p.m.; 53 miles by car, 5 on foot. Observers together. Bud Johnson, Dick Lorenz, Norwood Hazard.

American Golden-eye, 24; American Merganser, 16; Red-shouldered Hawk, 2; Bald Eagle, 6; Sparrow Hawk, 1; Bob-white, 4; Ring-necked Pheasant, 1; Herring Gull, 300; Mourning Dove, 2; Barred Owl, 2; Flicker, 2; Red-bellied Woodpecker, 4; Red-headed Woodpecker, 19; Hairy Woodpecker, 1; Downy Woodpecker, 17; Blue Jay, 11; Crow, 9; Black-capped Chickadee, 36; Tufted Titmouse, 7; White-breasted Nuthatch, 10; Brown Creeper, 8; Golden-crowned Kinglet, 2; Starling, 31; English Sparrow, 50; Cardinal, 9; Slate-colored Junco, 33; Tree Sparrow, 26; Song Sparrow, 7; Snow Bunting, 60. Total, 29 species. The Snow Buntings were seen on almost every field trip to Credit Island in late December and January; they were always found on the rocky, weeded wing dams, usually about 30 birds seen at one time. On Nov. 2, 1947, Rodney Hart and Norwood Hazard saw a partially albino Cardinal on Credit Island. A female Cardinal, apparently the same bird, was seen on Nov. 25, 1949. On Dec. 14, 1949, a Snowy Owl was observed on top of the Davenport high school building by about 2,000 students; the owl did not notice the activities of the students or the flock of roosting pigeons at the building. On Jan. 27, 1950, a Northern Shrike was observed by Fred Hall, Arnold Carlson and Norwood Hazard. (The above census was received on Feb. 13, too late to include in our tabulation of Iowa Christmas censuses.—Ed.)

December Notes.—During census week (late December, 1949) these species were observed on Cedar Lake in Cedar Rapids by Dr. Alfred Meyer and others: American and Hooded Mergansers, Pintails, Lesser Scaups, Black Ducks, Coots and Herring Gulls. They were not present the day we took our census. I was at home (Wheatland) for the Christmas holidays, and did some birding near there. I saw the Pileated Woodpecker twice. A Snowy Owl was shot near Toronto, Iowa, in December, and the specimen was mounted.—C. ESTHER COPP, Cedar Rapids, Iowa.

Snowy Owl at Mt. Pleasant.—On December 19, 1949, I was called over to the Iowa Wesleyan biology laboratory to see a Snowy Owl which a student had brought in. The bird had been shot by a farmer on the Walter Bryant farm about a mile north of town. It was still alive but its wing was so badly shattered near the body it seemed best to kill it and mount it. It measured 22 inches long and had a wing spread of 50 inches. I heard that three more Snowy Owls were seen at the airport southeast of town, but I was unable to verify the report.—ROY OLLIVIER, Mt. Pleasant, Iowa.

Snowy Owl Records.—The following records for the Snowy Owl during the past winter should be published. One bird was taken at Des Moines before Thanksgiving, and I saw it in the zoo there. One was shot outside Cedar Rapids and brought in on November 22; Iola Tillapaugh had this mounted and it is now in her general science room at Franklin high school. Another was shot near this city about two weeks later; Myra Willis has this specimen in her room at Wilson high school. The Fred Kents of Iowa City saw a Snowy Owl at Amana Lake in December. One owl was shot in Davenport in December, as reported by Fred Hall. Another was shot near Farmersburg, Iowa, January 22.

A Snowy Owl was seen by many members of the Cedar Rapids Bird Club at Cedar Lake on January 8. The bird stayed for some time and was last definitely reported on January 19. Another Snowy in the Cedar Rapids region was reported in the Indian Creek area, January 31.—ROBERT F. VANE, Cedar Rapids, Iowa.

Snowy Owl and Bald Eagle Records from Black Hawk County.—On January 2, 1950, a live Snowy Owl was brought in to the Iowa State Teachers College zoological collection by the county game warden, W. J. Ellerbrock. It had been found injured, by a trapper near Jesup, December 25, 1949, and had been fed on muskrat carcasses. The bird is prominently barred with dark brown, and thus probably represents a young bird of the year. The left wing droops from some injury, and a slight limp is present. After being caged at Cedar Falls, the owl was presented with a live white rat, which it ignored for two days, not eating it until the animal was killed. It has eaten another one since, and at the present writing (Jan. 7) seems in fairly good health. No attempt has been made to handle it freely, but it does not object to being stroked on the head and back, or to being shown off to groups of students. Two other unverified press notices of Snowy Owls were reported in December, one from Des Moines and one from Mt. Pleasant.

On December 28, 1949, an adult (white-headed) Bald Eagle was found dead in a tree one mile north of Benson by Carl Hanson. A photograph of Mr. Hanson and his son holding the bird appeared in the Cedar Falls Daily Record December 29. The specimen was given to Iowa State Teachers College and will be mounted. Mrs. King, living $1\frac{1}{2}$ miles west of Grundy Center, Grundy County, reported seeing a Bald Eagle on her farm "recently."—MARTIN L. GRANT, Cedar Falls, Iowa.

Snowy Owls in Clayton County.—Records of the Snowy Owl have been numerous in this winter of 1949-50. On November 20 I examined a recently killed owl hanging on a fence together with a Great Horned Owl and several Red-tailed Hawks, near Farmersburg. One was shot near Monona on December 14 and one at Froelich on December 19. Three owls were flushed from a brush heap by a passing train near Froelich on December 16. One was seen near Monona on December 28 and one was shot January 4. On January 29 I saw one on the roof of the silo on my property in Giard, where it stayed nearly an hour. I have nine other records, not verified, in this northeast corner of the county; four of these were reported as shot. The popular belief that three out of every four of the Snowy Owls involved in these invasions do not return north, seems to be well founded.—O. P. ALLERT, McGregor, Iowa.

A January Bird List.—On January 6, 1950, Mrs. John Barlow and I covered the area around Grundy Center, Pine Lake and Steamboat Rock. During our trip, which lasted seven hours, we saw the following birds, an interesting list for this date. Goshawk, Red-tailed and Rough-legged Hawks, Ring-necked Pheasant, Mourning Dove (about 15), Screech and Barred Owls, Belted Kingfisher, Red-bellied, Red-headed and Downy Woodpeckers, Blue Jay, Crow, Chickadee, White-breasted and Red-breasted Nuthatches, Brown Creeper, Northern Shrike, Starling, English Sparrow, Cardinal, Goldfinch, and Slate-colored Junco.

The Goshawk was studied in perfect light at a distance of not over 300 feet, with a pair of 8-power and Bausch & Lomb 7x. 35 binoculars. The bird was unmistakable because of size, color of breast and back, and the other markings were plainly seen.—MRS. J. RAY KING, Grundy Center, Iowa.

Wilson's Nesting Record of the Brown Creeper in Iowa.—The only known record, or at least published record, of the nesting of the Brown Creeper in Iowa was made by the late Burtis H. Wilson of Davenport. The record was published only as a very brief note in one of the now extinct journals, and again given only passing notice in his 1906 list which was published in the "Wilson Bulletin." If for no other reason than the historical point, it may be well to publish the record as it was given in the journal of Wilson. The journals that he kept concerning the local bird life from his early teen-age until a man were given to the Davenport Public Museum by Mr. Wilson's son in 1940, after the death of his father. I wish to thank Burt L. Wilson of Chicago and Fred Hall, of the Davenport Public Museum, for their permission to make the below quotation from Wilson journal.

"May 30, 1891. I spent this whole day on Offerman's and other islands in the Mississippi River about three miles below Davenport. While sitting in a boat on the bank of a small island and waiting for H. C. Mark who had gone ashore, I saw a pair of Brown Creepers alight upon a large dead willow stump and one of them disappeared behind a large piece of loose bark which was hanging by its upper end about 15 feet from the ground. Upon climbing to the place I found the nest between the bark and the tree trunk. The nest was soft and contained three young birds a day or so old. I saw about 50 Redstarts, a Prothonotary Warbler, seven Quail, and about eight Black-crowned Night Herons."

The island that is referred to as Offerman's is now known as Credit Island. At that time it was in a much more primitive and undeveloped state than now. Coupled with this is the fact that the Island was then accessible only by boat for the most part.—JAMES HODGES, Davenport, Iowa.

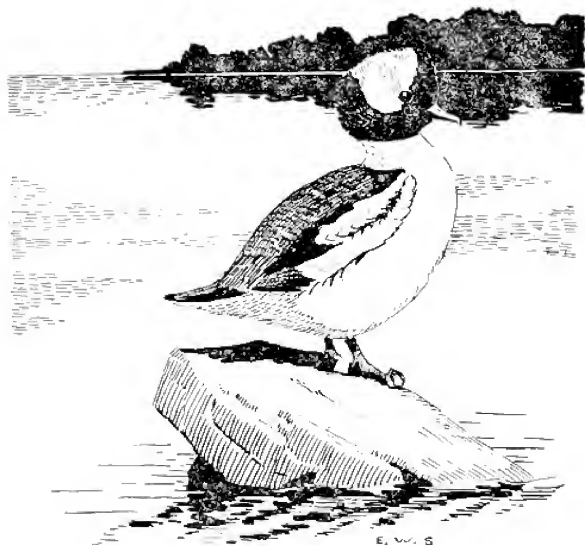
Bewick's Wren at Mount Vernon.—While strolling through the town of Mount Vernon on March 28, 1949, it suddenly dawned on me that I was hearing the song of a Bewick's Wren, and after a few moments of searching it was located a block away. Identification was entirely by song as no markings could be noted at that distance with naked eyes, and the bird flew away before I could get near enough to get a good view. The very next day, however, a Bewick's Wren was clearly seen and heard by both Mrs. Bliese and me just across the street from our home. From that time on a Bewick's Wren was either seen or heard on various days until May 6. No further record was obtained until June 10, when we moved from town.

Only one bird was ever observed at one time, but since some of the observations were about as far apart as the length of Mount Vernon, we suspected the presence of more than one. Most observations were in the yards containing many bushes and trees a block or two south of the Methodist church, roughly in the middle of the south part of town.—JOHN C. W. BLIESE, Ames, Iowa.

An Aid in Counting Birds in Flight.—In obtaining data on the numbers of Bronzed Grackles coming to a roost daily, attempts were made to estimate their numbers by tens as they flew past some convenient electric wire, telegraph pole, etc. When the birds came in small flocks, at intervals, there was ample time for counting and for recording the figures, but when they passed by in a steady stream, counting sometimes had to be continued for a matter of minutes, allowing no time for recording until the flight was over. This occasionally helped to introduce some error after the total count reached several hundreds, because the observer would sometimes forget which of the hundreds he had last tallied mentally. Naturally the situation became worse after several thousand birds had passed.

The difficulty was overcome by using a mechanical hand tally counter, such as is used in hospitals for blood counts, each estimate of ten birds being recorded by a push of the thumb. In the model used a total of 9,999 counts can be recorded, and there is a reset which can instantly return the counter to zero. A long key chain, fastening the instrument to the lapel of a jacket, proved of value in getting it out of the pocket quickly when necessary, and permitted the hand to operate it and also to steady a pair of binoculars for distant observations.—JOHN C. W. BLIESE, Ames, Iowa.

Winter Notes from the Big Sioux River Valley.—The Weather Bureau predicted a clear, warm day for December 28, 1949, so we made a short-notice trip up the Big Sioux River valley to Oak Grove State Park, north of Hawarden, Sioux County. Here, with the temperature a warm 54 degrees, we ate our lunch at a picnic table, while four slick, fat white-tailed deer watched us from the brush about 50 yards away. They are part of a herd of nearly 15 deer, which use the park for a sanctuary (how they need it with all the illegal deer hunting going on in the Big Sioux Valley!) Bird life was not scarce and we saw many Cardinals, Flickers, Hairy Woodpeckers, Downy Woodpeckers, White-breasted Nuthatches, Brown Creepers, Tree Sparrows, Slate-colored Juncos, Blue Jays, Black-capped Chickadees, and we heard several Ring-necked Pheasants. The park is a natural incubator for the last named species. On the way to and from the park, we saw many Crows and Starlings, a few Horned Larks, and the following hawks: Marsh Hawk, 1; Red-tailed Hawk, 3; Rough-legged Hawk, 8. The best records for the day were made as we neared home and saw a Northern Shrike near the T. Fred Weber farm near Milnerville, and another Northern Shrike near the J. A. Sturtevant farm, just north of Stone State Park but in Plymouth County.—WM. YOUNGWORTH, Sioux City, Iowa.



BUFFLE-HEAD

From a drawing by E. W. Steffen.

Further Winter Notes from the Big Sioux Valley.—On January 22, 1950, we made a special trip to the northwest corner of the state of Iowa to look for Snowy Owls, but our search was in vain. Our reward, however, was a field day with Rough-legged Hawks. We drove up through central and eastern Plymouth, Sioux and Lyon Counties and then worked along the Minnesota state line to Gitchie Manitou State Monument, where we had planned to eat our lunch. We found the preserve in such a run-down, defunct condition, that a nearby country school yard offered a much pleasanter place to park and eat.

Our bird list for the trip was not large and we saw the following wintering species: Flicker, 1; Downy Woodpecker, 3; Hairy Woodpecker, 1; one healthy Meadowlark near Klondike; a few Horned Larks; about 50 Lapland Longspurs; a few Chickadees and Tree Sparrows; hundreds of Crows; and it seemed that every farm had its own private flock of Starlings, as they have become plentiful. Pheasants were seen quite often along the Minnesota and South Dakota borders. Two Sparrow Hawks, one Marsh Hawk, one Red-tailed Hawk, and one fully-plumaged Cooper Hawk were seen, the first three species in Lyon County, the latter in Plymouth County.

Our final count on the American Rough-leg Hawk was 28 birds, with about all phases of coloration involved. Most of these hawks were seen in Lyon County and we found they were quite tame. In one instance we drove up within 10 feet of one as it sat in the road and calmly pulled a dead pheasant apart. We sat there some five minutes before the hawk finally took off, and then it merely flew to a nearby fencepost and sat there. We got out and examined the pheasant. From its frozen condition, we decided that it had been killed by a car and the Rough-leg was just doing a good scavenger job on it. At another place we saw a Rough-leg sitting on a fencepost and as we slowed down to stop, two pheasants got up and started to run down the fence row. They ran right in front of the hawk and not 10 feet from the fence line. The pheasants didn't seem to mind the hawk and were more interested

in getting away from the car. The hawk in turn didn't seem at all concerned with the pheasants and didn't bother them in the least. To the writer it would appear that this species of hawk is strictly beneficial and probably doesn't take game birds, except in extreme hunger.—WM. YOUNG WORTH, Sioux City, Iowa.

A Record of the Passenger Pigeon for the Scott County Area.—Since records of now extinct species of birds are always of historical interest, the following record is presented. The record was taken from the journals of the late Burtis H. Wilson. These journals were presented to the Davenport Public Museum several years ago. Wilson listed this record in his 1898 journal and it is quoted verbatim:

"An old gentleman who has lived in this vicinity for 45 years told me today of a flight of Passenger Pigeons which occurred about 1855, lasting three or four days and darkening the sky while it continued. This flight took place in the spring, the pigeons coming from the west. Everyone who could find a weapon went gunning for them. Sometimes they flew so high as to be out of range, while others dropped down close to the earth. About the year 1870, early one morning in March, he saw another flock, also coming from the west. This was the last time he has seen them."

So far as I know this is the first preserved record concerning this bird in this immediate vicinity.—JAMES HODGES, Davenport, Iowa.

Specimen of the Eskimo Curlew for Iowa Discovered.—A local ornithologist, Donald Davison, told me that when he visited Arthur T. Wayne in South Carolina a good many years ago he noticed that Mr. Wayne's collection contained a skin of the Eskimo Curlew taken in Iowa. Upon securing this information I instigated a search for the specimen, which was found in the Charleston Museum at Charleston, South Carolina. This specimen was purchased from the estate of Arthur T. Wayne in 1930 and is number 30.147.229 in the Charleston Museum collection. The original label reads as follows:

Numenius borealis. Female

May 3, 1901. Davenport, Iowa.

Reverse: Bought of M. Abbott Frazar.

The original tag on the specimen reads:

Female. Davenport, Iowa

May 3-01.

Reverse: aan. \$6.50

This specimen is significant on several counts. It is one of the few Iowa specimens the exact location of which is known. DuMont (A Revised List of the Birds of Iowa) lists only three known specimens; thus this is the fourth. DuMont also records that there appear to be no Iowa records of this species after 1893, the species being extinct in Iowa. The Charleston specimen advances the last record eight years.

However, the data on the specimen still leave some information to be desired. Who collected the bird and how did M. Abbott Frazar secure it? Since the bird is now extinct, it would be of interest to know the exact location where the bird was collected, though it was probably at or near Davenport.

I wish to express my appreciation of the following individuals who aided my quest for this specimen: Donald Davison, Davenport, Iowa; Alexander Sprunt, Jr., National Audubon Society; James L. Peters, Museum of Comparative Zoology; and E. Milby Burton, Director of the Charleston Museum.—JAMES HODGES, Davenport, Iowa.

Long-eared Owl, White Pelicans and Franklin's Gulls at Spirit Lake.—Several nights in September, 1949, we heard a Long-eared Owl call in our yard. Once before we have heard one call in Dickinson County, and once have seen an adult and young. We are familiar with owl calls and this identification is positive.

About 300 White Pelicans were in the region in September. It is only during the last few years that we have seen these birds during the fall migration, though they have been spring migrants for many years.

In the June, 1932, issue of "Iowa Bird Life" we told of the abundance of the Franklin's Gulls in the fall. Their number has fluctuated from year to year since that time, but the general tendency has been a decrease. We have no accurate way of estimating the number as we did in 1932 but believe there are now less than one percent as many birds as there were then.—DRS. FRANK AND MARY ROBERTS, Spirit Lake, Iowa.

Late Fall Migration Notes from the Sioux City Region.—Ideal fall weather persisted in northwest Iowa during the fall of 1949, with an absence of snow and many warm, sunny days which were inducive to numerous hunting trips. These trips furnished the source for the following records. Red-winged Blackbirds were seen in Woodbury County on November 28 and in Osceola County on December 5. Meadowlarks were found in Plymouth County on November 28. Lapland Longspurs were first seen in Woodbury County on November 7, a few were found in Ida County on November 11, small numbers were seen in Sioux, O'Brien, and Clay counties on November 12, and they were numerous in Pocahontas County on December 2. Large numbers were found in Osceola County on December 5. Mild weather induced the Harris Sparrows to stay in Iowa right up to December 1. We found them in Sioux County up to November 23, and in Woodbury County to above mentioned date. Song Sparrows were also around the yard until November 19. Golden-crowned Kinglets were seen on November 11. I watched a flock of more than 100 Ring-billed Gulls feeding on mud flats at Storm Lake on December 2. The last migrating Franklin Gulls were listed in Ida County on November 11. I saw a flock of about 15 Killdeer in Ida County on November 11. Mourning Doves in Lyon County on November 23, and a flock of six doves in Woodbury County on November 28.

Marsh Hawk records were as follows: November 11, three in Ida County; November 23, one each in Lyon and Sioux Counties; December 2, one each in Woodbury and Cherokee Counties. Red-tailed Hawk records: November 11, 10 were counted in a wooded area in Ida County; November 4, four seen in Clay county and one in O'Brien County; November 23, one in Plymouth County; December 2, one in Woodbury County, two in Cherokee County, and December 5, two in Sioux County.

Sparrow Hawk records were: November 23, one in Sioux County and December 5, one in O'Brien County. A single Long-eared Owl was flushed twice from a small grove near Allendorf, Osceola County, on December 5. My only fall record for the Short-eared Owl was a lone bird on November 11 in Ida County. This one would have been a dead owl, if I hadn't called to some of the boys to hold their fire.

The records of the American Rough-legged Hawk are given separately, because they are more numerous. It is apparent that as the fall season advances, the more common early run of Red-tailed Hawks move on to the south. Except for a few hawks remaining in the timbered areas of the Big and Little Sioux River valleys, the entire area for the winter is taken over by the Rough-legs. The Rough-leg Hawk was found to be rather common in the fall of 1949, as the following records show: November 11, one in Ida

County; November 12, one in Cherokee County and four in Clay County; November 23, four in Plymouth County, five in Sioux County, and 11 in Lyon County; November 28, one in Plymouth County and nine in Sioux County; December 2, three in Woodbury County, four in Ida County, three in Buena Vista County, two in Sac County, two in Pocahontas County, and one in Cherokee County; December 5, four in Plymouth County, four in Sioux County, two in O'Brien County, 20 in Osceola County. From one little grove near Allendorf we flushed 11 Rough-legs, which took to the air and circled about until we left. Many of these Rough-legs were complete melanistic specimens and a dull sooty-black. As they watched from some fence post, the only bit of color in evidence was the yellow of the cere. It appears to the writer that because the melanistic Rough-leg is so common in the fall and winter, many bird students identify them as Harlan's Hawk.—WM. YOUNG WORTH, Sioux City, Iowa.

Observations on Lapland Longspurs and Horned Larks.—December 2, 1949, broke as a fine, clear day. Under the arm of a favorable Government Weather Bureau forecast, we took off for the little town of Varina, Pocahontas County, where pheasants were reported to be slightly more plentiful than near Sioux City.

As we neared Varina, we espied a small waterhole in a pasture near the road and decided that we might see a few birds and enjoy our lunch at the same time. This was the ruination of our pheasant hunting trip. We had just made one bite on a piece of cold chicken when we noticed a swirl of birds over the waterhole. The chicken was dropped for the binoculars.

Flocks of from dozens to hundreds of Lapland Longspurs would come swirling around the waterhole and alight for a few dainty sips. Then they would boil up into the air in large flocks as other birds arrived. In some of these flocks were tag-along Horned Larks, which didn't seem to be too much interested in the water but more concerned with the seeds they found in the pasture above the water line. Because of this the Horned Larks did not always leave when the longspurs did, but stayed for our benefit. This will be discussed later.

Our lunch was constantly being interrupted by arriving and departing flocks of longspurs. Finally we finished and then began a long but pleasant session of bird-watching. After 30 years of bird-watching in northwest Iowa, and never having seen Smith's Longspur in the flesh, I have decided that it is really a rare bird in this area. I have never passed up a chance to watch all Lapland Longspur flocks (and occasionally collect a few birds), but to no avail—no Smith's Longspurs. I am inclined to agree with Roberts in his "Birds of Minnesota," that fall birds are often confused with the Lapland Longspurs and many records of fall Smith's Longspurs are not valid ones, at least few, if any, are backed up with specimens. Smith's Longspurs in full spring plumage are another matter, but there again, I find only one recent authentic record; this was made by Wesley Kubichek during April, 1928 and 1929, five specimens collected in Iowa County.

But to continue our vigil, we checked each incoming flock of longspurs and saw many odd-colored individuals, as one often does in fall flocks of Lapland Longspurs, but none of them looked like Smith's Longspurs to us—at least how we thought they should look.

Wilfred D. Crabb, in his undergraduate work at Morningside College, Sioux City, Iowa, worked on a Lapland Longspur project for the late Dr. T. C. Stephens. In the course of his work he collected and made up dozens upon dozens of longspur skins, but Dr. Stephens or the writer never found any specimens that came up to the classification of Smith's Longspurs.

The Horned Larks found at the waterhole were very obliging posers. We were able to pick out several of the large, dark-colored, so-called Northern subspecies; numerous big, paler-colored fellows, which are classified as Hoyt's subspecies; and many very pale larks, which showed up almost white when seen near the other more highly colored individuals. These latter birds, when collected for skins and sent in from Iowa to the taxonomists, usually are returned labelled juveniles of some species, but if the label had been written up from western South Dakota, the specimens probably would be identified as Desert Horned Lark.

Mixed flocking of Horned Larks during the winter also poses the question that if these various so-called subspecies of larks live together all winter, what is to prevent their migrating north in the spring and being mix-mated? Where can we draw the subspecies line between the various subspecies? The above queries have been found true at least in one case, when Tavener found breeding Northern and Hoyt's Horned Larks mixed as to pairings in the Churchill, Manitoba, region.

I feel that we should recapitulate occasionally on our prime interests in life, and this applies especially to one interested in bird study as a hobby. The question of having the joy of our bird work cluttered by the haze of subspecies, either specifically in the case of the above-mentioned Horned Larks or in the field of all species, can not be better stated than in the wise words of Dr. T. S. Roberts, in "Birds of Minnesota," Vol. II, page 638: "The amateur bird-student will be wise to disregard the races of the Horned Lark. They can not be distinguished in the field, and only by an expert in the study. The common race in Minnesota is the Prairie Horned Lark. The others are of infrequent occurrence. To the Bird-lover, who is pursuing the subject for the joy and satisfaction of knowing the birds that he sees by the way, a Horned Lark is simply a Horned Lark. That is enough. Any attempt at discriminating subspecies will only lead to confusion and mar the pleasure of the casual observer."

Nothing more could be added to the above statement, without detracting from it, for it stands out like a guidepost for the great army of bird students, most of whom are amateurs.—WM. YOUNG WORTH, Sioux City, Iowa.

LOCAL BIRD CLUBS IN IOWA

SIOUX CITY.—Organized in 1913, the Sioux City Bird Club is primarily an outdoor organization. It has for its objectives promotion of the enjoyment, study and protection of birds and wildlife. Its aims are to stimulate, through education of people of all ages, a greater appreciation and knowledge of the world of nature about us—thus furthering the conservation of our natural resources. The Club continues to publish quarterly its official mouthpiece, "The Dickcissel," a mimeographed journal which records the activities of our organization.

The Audubon Screen Tours have been presented in Sioux City for six seasons. During 1949, Tom and Arlene Hadley presented "Happy Valley" on January 13; Bert Harwell presented "Canada West," April 13; Alice and Harold Allen, "Sounds of the Sageland, May 9; Allan Cruickshank, "Trails for the Millions," October 27. In 1950, Karl Maslowski showed his "Beneath Buckeye Skies", on January 18, while Dr. George Sutton is scheduled for February. Tom and Arlene Hadley for March, and Roger Tory Peterson for April. This year we are following a new plan, in which no tickets or single admissions to the screen tours are sold. Everyone in the screen tour audience holds a year's membership card.

On March 15, 1949, the annual beaver dinner was held at the Jackson Hotel. Paul Leaverton, Supt. of Game for the State Conservation Commission,

spoke on "The Importance of Cover for Wildlife" and described the uses of the Multiflora Rose. At our regular monthly meeting, in February, the special subject of winter feeding of birds was discussed, and Dr. John L. Schott presented his kodachrome travelog on the Southwest.

During February our members made several field trips to study birds and the general conditions of food, cover, etc. for wildlife in winter. There was much snow and ice on the ground during the entire winter in this area. Our Club has always taken part in the Christmas Bird Count, every year since its organization in 1913.

The Woodbury County chapter of the Izaak Walton League and our Club worked together in the interests of conservation and were instrumental in the placing of hundreds of pounds of food in areas where birds congregated. Three rural mail carriers covered about 130 miles each day and carried on a "Bird Food-lift" in which eight large sacks of grain were fed to the birds in the area.

On March 19, we made a trip to the Missouri River bottoms to see the thousands of geese in migration. The geese stopped near Sioux City to rest and feed, and thus afforded a wonderful opportunity for observation. "Shooting" with the cameras and binoculars was very good, for the day we went the light was excellent. Also on that day the geese made their "take-off" for the next leg of their journey to nesting grounds. It was a sight never to be forgotten.

May 15 was the date of the Club's May Bird Count. We were in the field from 6 a.m. to 6:30 p.m. (198 car miles, 21 foot miles) and listed 89 species. On May 22, we made a joint field trip with the Sioux Falls (S. Dak.) Bird Club to Heron Lake, Minnesota. Dr. Olin S. Pettingill, Jr., of Carleton College, Northfield, Minnesota, had his zoology class there, and under his able leadership we studied the nesting colony of Franklin's Gulls, also Yellow-headed and Red-winged Blackbirds, Marsh Wrens, White Pelicans and American Bitterns. After this a trip was taken to the marsh area southeast of Worthington, Minnesota, under the leadership of Carl M. Johnson, where we studied water and shore birds. Ten species of the order of Scolopacidae were identified by the entire party. The Heron Lake trip afforded a wonderful study in ecology. W. W. Barrett is chairman of the Field Trip committee. An entire year of field work and study of our wild birds is planned by this committee.

On November 28, we held a special indoor meeting at Latham Park House. We had a business meeting, heard reports of all committees, and a book review was given by Miss Ruth Sampson. On February 2, 1950, Herb and Lois Crissler, of Washington state, presented their color film, "The Living Wilderness", on the life history of the American elk.—ZELL C. LEE.

RECENT BIRD BOOKS

SOUTH CAROLINA BIRD LIFE, by Alexander Sprunt, Jr., and E. Burnham Chamberlain (University of South Carolina Press, Columbia, 1949; library buckram, 8vo, pp. i-xx & 1-585, with 35 colored plates, 49 photographs; price, \$10.00).

A new state book which, without doubt, will find a foremost place in ornithological literature is "South Carolina Bird Life" by Alexander Sprunt, Jr. and E. Burnham Chamberlain. The authors are eminently qualified to write an authoritative book concerning the avifauna of South Carolina because of their wide acquaintance with the state and its possibilities in bird life. It is highly readable and contains information written in a manner that should attract even the casual reader of bird books.

As an indispensable adjunct of any nature book, to my notion, South Carolina Bird Life is bountifully illustrated both with colored reproductions

from the brushes of contemporary bird artists and with well-chosen photographs from some of the foremost nature photographers. Four bird artists provide the colored plates. Two of these, Francis Lee Jaques and Roger Tory Peterson, are well known and have reputations well established. Jaques' habitat groups with their inimitable atmosphere and Peterson's finely executed portraits add much to the value of the book. The other two artists, Edward von S. Dingle and John Henry Dick, are newcomers to me. It is always interesting to readers to view new talent and, no doubt, desirable on the part of authors to give new artists an opportunity to illustrate even though they may not have reached their peak of ability. There unquestionably is merit of a high order shown in some of the plates of these new artists. Dick's birds are well done, and Dingle has at least two meritorious habitat groups. However, one might feel that a plate with birds painted on a white background leaves much to be desired in a picture; or one might consider that two or three of the plates are too somber in tone; or one might wish that more accuracy ornithologically were shown in a few instances. For example, the Wood Thrush in Plate XXIII might better have had a booted rather than a scaled tarsus.

In general it is regrettable that cost seems to dictate that numerous birds be crowded on one plate entirely contrary to bird habits. Habitat groups solve to some extent the problem of several species on a plate, if well done. Fortunately this volume contains some very attractive plates of this type. However, I have wondered time and again why the public who buys bird books cannot be offered a volume once in a while with the birds in the plates arranged as in Plate XVI. Here are five species of owls illustrated artistically, in a manner that has high appeal, and in a way that satisfies ornithologically.

When all is said and done, however, "South Carolina Bird Life" can be rated as a fine book and should find a place on the shelf of everyone interested at all in bird life.—EARNEST W. STEFFEN.

* * * * *

THE AWL-BIRDS. by J. K. Stanford (Devin-Adair Co., New York, 1949; cloth, 8vo, pp. 1-90, with 29 drawings by A. M. Hughes; price, \$2.00).

In this thin but handsome little book we have an unusually interesting account of the return of the European Avocet to England as a breeding bird after an absence of 123 years. (Englishmen named them Awl-birds because the Avocet's bill resembles a cobbler's awl.)

The book is written as fiction but is based on fact. A young man whose body and health have been shattered by the war buys an old estate on a war-battered English shore. Much of the estate is in marsh land flooded by salt water after the sea wall was broken. It had been used as a battle-school area and is still heavily mined and dangerous for human visitors. The house on the property, Bledgrave Hall, had been severely damaged when used for target practice.

The ex-service man is engaged in the heart-breaking task of rebuilding the home and protecting three nests of the Avocets, which have chosen his place for the first English nesting in more than a century. An oologist tries to steal the eggs (and almost succeeds). We learn the methods of such collecting in England and see the oologist at his worst. It is a colorful, exciting narrative with a distinctly English flavor that American readers will enjoy.

The author of the book, a war veteran, was present at the finding of the first eggs of the Avocet in England in this century. Actually the breeding site has been kept a closely guarded secret, and groups from Oxford have kept a constant vigil over the eggs and young birds. Thus the author, familiar with the facts at first hand, has produced a fine story and gives us an excellent lesson in conservation from worn-torn England.—F. J. P.

Mrs. Faye Brice MacMartin, one of our well-known members, has published a 44-page booklet entitled "The Effigy Mound National Monument in Iowa." She uses the medium of verse to describe the historic and highly scenic region about McGregor, Iowa. It is an interesting little book, describing in nicely done verses the physical features of the famous region. There are 23 pictures, mostly from photographs. The book sells for 50c.

* * * * *

The Pennsylvania Game Commission (Harrisburg) has made two very fine bird publications available for residents of the state. We wish that we had something of the sort here in Iowa for people who have an awakened interest in birds but only a rudimentary knowledge of them. One booklet is entitled "Pennsylvania Bird Life," with Hal H. Harrison as author. It contains 72 pages, has 124 birds in color, and 82 photographs, with interesting chapters on the economic value of birds, how to study them, how to attract birds (by suitable houses, feeding stations in winter, planting of trees and shrubs), lessons in conservation, lists of books, and brief descriptions of 50 species. The other booklet is on "Pennsylvania Birds of Prey", and was prepared by Robt. D. McDowell and Leo Luttringer, Jr., with 32 pages, 4 colored plates, 9 photographs and 64 drawings. It gives the place of the hawks and owls in the scheme of things and is an educational project of the finest kind—one that will do a great deal of good if it can be given adequate distribution where it is most needed. The first booklet sells for 50c, the second for 25c (perhaps distributed free within Pennsylvania).

In going over the papers in the library of the late Dr. T. C. Stephens, Mrs. Stephens found a quantity of the mimeographed "Letters" of the Iowa Ornithologists' Union, which constituted our official publication from 1923 to 1928. These letters contain a good deal of the Union's history, and we believe many of our members would like to have them. There are 13 of the 24 letters available (1923-26). These will be made up into sets and sent to members who request them as long as the supply lasts. A charge of 25c per set to cover mailing will be made. Write to Editor Pierce, at Winthrop, Iowa.

We would like to see the Iowa Academy of Science exercise a more strict editorial policy in the publication of bird papers in its "Proceedings." Vol. 55 of which has just come to hand. In an article signed from Mt. Pleasant, in Vol. 55, a record of the Pine-woods Sparrow is given without substantiating evidence or any details whatever. Serious bird students would hardly be willing to accept this southern species as an addition to the Iowa state list without a collected specimen for proof. A little more care on the part of the editor would not have allowed this record without data to get into print.

MEMBERSHIP NEWS

A number of our members vacationed in the South during the winter. During the Christmas holidays Miss Myra Willis, of Cedar Rapids, took the Audubon Bulls Island trip out of Charleston, South Carolina. Dr. Charles A. Stewart, of New Albin, spent the winter at Gulfport, Mississippi. Dr. and Mrs. F. L. R. Roberts spent the last half of the winter in Florida, going there by way of New Orleans. New birds on their list were Brown Pelican, Boat-tailed Grackle, Black Vulture, Laughing Gull, and Worm-eating Warbler. Charles J. Spiker, of Branchport, N.Y., had a ten-day trip to Florida in January and added 17 species to his Life List, which brought it up to 333. Among the interesting birds that he saw were Anhinga, Purple Gallinule, Limpkin, American Oyster-catcher and Royal Tern.